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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/577,731

Applicant(s)

VINCENT ET AL.

Examiner

PETER CHAU

Art Unit

2476

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 7-9 and 11-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 7-9 and 11-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-940)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Receipt is acknowledged of amendment filed on 9/29/2010. Claim(s) 2, 7-9, 12-13, 15-16 and 18-20 have not been amended. Claim(s) 1, 11, 14, 17 and 21-22 were amended. Claim(s) 3-6 and 10 have been cancelled. Claim(s) 23-26 are newly added.

Response to Arguments

2. Applicant's arguments filed 9/29/2010 have been fully considered but they are not persuasive.

Applicant argues:

"the claimed notification message is not a response message made in answer to request for the content and does not impose the closely associated temporal requirements inherent in the request-response messaging used in Lipsanen".

Examiner respectfully disagrees. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the claimed notification message is not a response message made in answer to request for the content and does not impose the closely associated temporal requirements) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant argues:

"point-to-point link notification is sent at a time in the first step which is not closely linked to the time at which the users of the mobile terminals expressed an interest in the content".

Examiner respectively disagrees. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., point-to-point link notification is sent at a time in the first step which is not closely linked to the time at which the users of the mobile terminals expressed an interest in the content) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant argues:

"Lipsanen does not teach or suggest sending a point- to-point link notification to a plurality of mobile terminals. The scheme taught by Lipsanen cannot send such a notification to a plurality of mobile terminals in the same step, since each request-response is handled individually as is described in Lipsanen."

Examiner respectively disagrees. Lipsanen still teaches the above limitation, specifically, sending a point-to-point link notification (pg. 8 lines 5-14, discloses user send "get n" message to server 120 and then server 120 forwards service parameters such as program identifier to the terminal via the UMTS/GPRS network) to a plurality of mobile terminals (pg. 1 lines 5-7, discloses multiple terminals to receive services. In support of this, pg. 7 lines 26-29, discloses users using mobile terminal 100 select broadcast programs). Also, the "step" does not define a boundary such as time that would exclude request-response being handled individually.

Applicant argues:

"The claimed sending of a point-to-point link notification message, in a first step, to a plurality of mobile terminals having registered with an MMSC server as interested in said content prior to said first step, is not taught or suggested by Kuisma".

Examiner respectively disagrees. For clarification, the combination of Lipsanen and Kuisma discloses the above limitation, specifically, sending of a point-to-point link notification message, in a first step, to a plurality of mobile terminals (pg. 8 lines 5-14, discloses user send "get n" message to server 120 and then server 120 forwards service parameters such as program identifier to the terminal via the UMTS/GPRS network) having registered with a server as interested in said content prior to said first step (pg. 10 lines 14-16, discloses user's viewing privileges can be set by previous agreements with either the telecom or broadcast operators). What Lipsanen does not

explicitly disclose is an MMS server, which Kuisma discloses in fig. 1. Also, the "step" does not define a boundary such as time that would exclude request-response being handled individually.

Applicant argues pages 11 and 12, that there would have been no reason for the skilled artisan to combine the applied references in any manner so as to result in the subject matter of instant claim 1 and the Office Action lacks any "articulated reasoning with some rational underpinnings" (KSR Int'; Co. v. Teleflex Inc., 127 S. Ct. 1727, 82 USPQ2d 1385(2007))) with regard to a rationale for combining Lipsanen et al. and/or Kuisma et al and/or Kim et al and/or Fingerhut et al.

However, the Examiner respectively disagrees. The motivation, for Kuisma et al, is that it is advantageous to adapt to known standards for implementation of MMS based communication for following reason: Companies actively involved in adhering to standards more frequently reap short- and long-term cost-savings and competitive benefits than those that do not. Standardization can lead to lower transaction costs in the economy as a whole, as well as to savings for individual businesses. Standards have a positive effect on the buying power of companies. Standards can help businesses avoid dependence on a single supplier because the availability of standards opens up the market. The result is a broader choice for businesses and increased competition among suppliers. Companies also have increased confidence in the quality and reliability of suppliers who use standards. In addition, standards are used by businesses to exert market pressure on companies further down

the value chain, i.e., their clients. Thus, businesses can use standards to broaden their potential markets.

Also, the motivation, for Kim et al, is that it is advantageous to adapt to known standards for implementation of MBMS based communication for following reason: Companies actively involved in adhering to standards more frequently reap short- and long-term cost-savings and competitive benefits than those that do not. Standardization can lead to lower transaction costs in the economy as a whole, as well as to savings for individual businesses. Standards have a positive effect on the buying power of companies. Standards can help businesses avoid dependence on a single supplier because the availability of standards opens up the market. The result is a broader choice for businesses and increased competition among suppliers. Companies also have increased confidence in the quality and reliability of suppliers who use standards. In addition, standards are used by businesses to exert market pressure on companies further down the value chain, i.e., their clients. Thus, businesses can use standards to broaden their potential markets.

Also, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lipsanen's system/method with the steps of a first server/"message server" creating a broadcast request, which includes content in its entirety/"payload" with an identifier/"message ID" and transmits the broadcast request to a second server/"activation gateway" for broadcast transmission of the payload and identifier as suggested by Fingerhut. The motivation is that (as suggested by Fingerhut,

paragraph [0125]) by allowing for the efficient delivery of information in a broadcast fashion.

Examiner submits that the following are some rationales which may be used when formulating a 103 rejection:

- (1) Combining prior art elements according to known methods to yield predictable results.
- (2) Simple substitution of one known element for another to obtain predictable results.
- (3) Use of known techniques to improve similar devices (methods or products) in the same way.
- (4) Applying a known technique to a known device (method or product) ready for improvement to yield predictable results.
- (5) Obvious to try" - choosing from a finite number of identified, predictable solutions.
- (6) Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces/market place incentives if the variations are predictable to one of ordinary skill in the art.
- (7) The TSM test. (Although the Supreme Court cautioned against an overly rigid application of TSM, it also recognized that TSM was one of a number of valid rationales that could be used to determine obviousness)

Examiner respectfully submits that, Examiner has indeed met "articulated reasoning with some rational underpinnings" for the reasons as follows:

- 1) Examiner has shown, the combination based on TSM test -The motivation being that (as suggested by Fingerhut, paragraph [0125]) by allowing for the efficient delivery of information in a broadcast fashion.
- 2) Known work (a first server creating a broadcast request, which includes content in its entirety with an identifier and transmits the broadcast request to a second server for broadcast transmission of the payload and identifier) in one field of endeavor (Fingerhut prior art) may prompt variations of it for use in either the same field or a different one (Lipsanen prior art) based on design incentives (allowing for the efficient delivery of information in a broadcast fashion) or other market forces/market place incentives if the variations are predictable (providing broadcast services) to one of ordinary skill in the art.

Furthermore, in response to applicant's argument that "This scheme is entirely different and completely incompatible with..." on pg. 13, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Furthermore, in response to applicant's arguments on pg. 12 and 13 that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it

must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Therefore claim 1, and claims depending therefrom, does not patentably distinguish over Lipsanen in view of Kuisma and/or Kim and/or Fingerhut.

Therefore claims 11 and 17, and claims depending therefrom, does not patentably distinguish over Lipsanen in view of Kuisma and/or Kim and/or Fingerhut for similar reasons as those provided with respect to claim 1.

Claim Objections

3. Claims 23-24 is/are objected to because of the following informalities: it is highly suggested to change "further comprising the wherein the plurality of mobile terminals" to "wherein the plurality of mobile terminals". Appropriate correction is required.
4. Claims 25-26 objected to because of the following informalities: it is highly suggested to change "further comprising the wherein the plurality of mobile terminals" to "where the mobile terminals". Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claim(s) 1, 7, 9 and 14-15 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 03/045064 to Lipsanen et al (hereinafter Lipsanen) and in further view of US PGPub 2002/0078228 to Kuisma et al (hereinafter Kuisma) and in further

view of US PGPub 2004/0029596 to Kim et al (hereinafter Kim) and in further view of US PGPub 2004/0171383 to Fingerhut et al (hereinafter Fingerhut).

As per claim 1, Lipsanen teaches **a method for a transmission system to transmit multimedia content to a plurality of mobile terminals** (abstract, discloses a transmission system to transmit voice, packet data and digital broadcast/multicast services) **over a radiocommunication network** (fig. 1 show a UMTS/GPRS network) **comprising:**

a first step of a server (fig. 1 box 120, discloses a Telecom/Portal server) **adapted to provide a point-to-point content transmission service** (pg. 9 lines 27-29, discloses Telecom server transmitting content through UMTS/GPRS network to a terminal) **transmitting a point-to-point link notification** (pg. 8 lines 12-21, discloses telecom server transmitting service parameters to a terminal and the service parameters include a time in which a transmission will start (i.e. a notification)) **including an identifier specific to a content over a dedicated point-to-point transmission channel to a plurality of mobile terminals, wherein said plurality of mobile terminals registered with said server as interested in said content prior to said first step** (fig. 1 shows a telecom server 120; pg. 1 lines 5-7, discloses multiple terminals to receive services; abstract, discloses a transmission system to transmit voice, packet data and digital broadcast/multicast services. pg. 8 lines 5-14, discloses user send "get n" message to server 120 and then server 120 forwards service parameters such as program identifier to the terminal via the UMTS/GPRS network; pg.

10 lines 14-16, discloses user's viewing privileges can be set by previous agreements with either the telecom or broadcast operators. Examiner correspond previous agreements and any one of voice, packet data and digital broadcast/multicast services to applicant's registered...as interested in...content prior to...first step and content, respectively);

a server adapted to provide a broadcast content transmission service (fig. 1 box 130, discloses a broadcast server; pg. 7 lines 28-29, discloses broadcast programs transmitted from broadcast network 140)

and a third step of said server broadcasting (fig. 1 box 130, discloses a broadcast server) **a message including said content over a broadcast channel** (pg. 4 lines 4-5, discloses broadcast server 130 coupled to broadcast network 140; pg. 7 lines 28-29, discloses broadcast programs transmitted from broadcast network 140).

Although Lipsanen teaches **a server, a point-to-point content transmission and a point-to-point link notification**, Lipsanen is silent on **a multimedia messaging services center (MMSC) server adapted to provide a point-to-point content transmission service transmitting a multimedia messaging services (MMS)-standardized point-to-point link notification**.

However, Kuisma teaches a MMSC transmitting a M-NOTIFIC-IND line 12 to a terminal (fig. 1) and MMSC transmitting a multimedia message to a terminal (paragraph [0042]).

Lipsanen teaches a server...adapted to provide a point-to-point content transmission service and transmitting a notification and the multimedia messaging

services (MMS) standard is a well known standard for having a MMSC server adapted to provide a point-to-point content transmission service and a multimedia messaging services (MMS)-standardization of a point-to-point link notification. Furthermore, it is well known in the art that applying a well known standard, or protocol, to a system provides the system with significantly improved industrial applicability. Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the MMS standard to the system of Lipsanen, since it is well known in the art that applying a well known standard, or protocol, to a system provides the system with significantly improved industrial applicability.

Although the combination teaches **a server adapted to provide a broadcast content transmission service** and **said server broadcasting said message**, the combination is silent on **a multimedia broadcast multicast system (MBMS) broadcast multicast service center (BM-SC) server** and **said BM-SC server broadcasting**.

However, Kim teaches a MBMS BM-SC broadcasting (paragraph [0025]).

Lipsanen teaches a server adapted to provide a broadcast content transmission service and said server broadcasting and the multimedia broadcast multicast system (MBMS) standard is a well known standard for having a MBMS BM-SC server broadcasting. Furthermore, it is well known in the art that applying a well known standard, or protocol, to a system provides the system with significantly improved industrial applicability. Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the MBMS standard to the system of Lipsanen

and Kuisma, since it is well known in the art that applying a well known standard, or protocol, to a system provides the system with significantly improved industrial applicability.

Although the combination teaches **said MMSC server, a multimedia broadcast multicast system (MBMS) broadcast multicast service center (BM-SC) server adapted to provide a broadcast content transmission service, said content in its entirety and said identifier**, the combination is silent on a **second step of said MMSC server transmitting a broadcast request to a multimedia broadcast multicast system (MBMS) broadcast multicast service center (BM-SC) server adapted to provide a broadcast content transmission service, said broadcast request including said content in its entirety and said identifier**.

However, Fingerhut teaches a first server/"message server" creates a broadcast request/"fleet broadcast request", which includes the content in its entirety/"payload message" with the identifier/"message ID" and transmits the broadcast request to second server/"activation gateway" for broadcast transmission of the payload and ID ([0129-0131]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination to have a second step of said MMSC server transmitting a broadcast request to a multimedia broadcast multicast system (MBMS) broadcast multicast service center (BM-SC) server adapted to provide a broadcast content transmission service, said broadcast request including said content in its entirety and said identifier, as suggested by Fingerhut. This combination would

benefit the system by allowing for the efficient delivery of information in a broadcast fashion (Fingerhut [0125]).

As per claim 7, the combination teaches the transmission method according to claim 1, wherein said MMS-standardized point-to-point link notification is M-Notification.ind (Kuisma fig. 1 shows a M-NOTIFIC-IND).

Examiner provides the same rationale for the combination as stated in claim 1.

As per claim 9, the combination teaches the transmission method according to claim 1, further comprising said MMSC server (Kuisma fig. 1) transmitting a decryption key to said plurality of mobile terminals for use by said plurality of mobile terminals in decrypting said content (Lipsanen, pg. 11 lines 11-12, discloses the broadcast keys are sent to the users which allow the terminals to decrypt the digital packets).

Examiner provides the same rationale for the combination as stated in claim 1.

As per claim 14, the combination teaches the transmission method according to claim 7 further comprising:

said MMSC server (Kuisma fig. 1) receiving an M-NotifyResp.ind acknowledgment message (Kuisma paragraph [0038], discloses acknowledging a notification message, which is sent by a MMSC, received with a m-NotifyResp-req. Examiner correspond m-NotifyResp-req to applicant's M-NotifyResp.ind) from said

plurality of mobile terminals (Lipsanen pg. 1 lines 5-7) **receiving said M-Notification.ind message** (Kuisma fig. 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination to include the MMSC server receiving an M-NotifyResp.ind acknowledgement message from the mobile terminals receiving the M-Notification.ind message, as suggested by Kuisma. This combination would benefit the system by transferring multimedia message in a multimedia message in a MMS (Kuisma paragraph [0001]).

As per claim 15, the combination teaches **the transmission method according to claim 14 wherein said second step occurs upon receiving said M-NotifyResp.ind acknowledgement messages** (Kuisma fig. 1 and paragraph [0042], discloses in response to receiving the M-RETRIEVE-REQ message, performing a process to receive multimedia message).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination to have wherein said second step occurs upon receiving said M-NotifyResp.ind acknowledgement messages, as suggested by Kuisma. This combination would benefit the system by transferring multimedia message in a multimedia messaging system (Kuisma paragraph [0001]).

9. Claims 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lipsanen and Kuisma and Kim and Fingerhut and in further view of U.S. PGPub 2003/0186704 to Tamura et al (hereinafter Tamura).

As per claim 2, the combination teaches the transmission method according to claim 1.

Although the combination teaches **in said first step said identifier sent to said plurality of mobile terminals** (Lipsanen fig. 1 and pg. 8 lines 5-14; pg. 1 lines 5-7), **reception of said content by said plurality of mobile terminals** (Lipsanen abstract, discloses the terminal receive the broadcast service transmitted by the broadcast network 140) and **said plurality of mobile terminals download said content from said MMSC server via said dedicated point-to-point transmission channel** (Lipsanen pg. 9 lines 27-29; pg. 1 lines 5-7 and pg. 8 lines 5-14 and Kuisma fig. 1), the combination is silent on **wherein, in said first step, said identifier sent to said plurality of mobile terminals is accompanied by a value corresponding to a waiting time for reception of said content by said plurality of mobile terminals and if said waiting time passes without said plurality of mobile terminals receiving said content, said plurality of mobile terminals requesting to download said content from said MMSC server via said dedicated point-to-point transmission channel.**

However, Tamura teaches first server/"content server" sends the waiting time/"maximum permissible value of the waiting time" to the mobile terminals ([0138])

and a terminal operating in standby for a certain waiting time and when the terminal hasn't received notification from the base station within the waiting time, the terminal makes a request to the first server/"content server" for download of content ([0026]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination to have in said first step, said identifier sent to said plurality of mobile terminals is accompanied by a value corresponding to a waiting time for reception of said content by said plurality of mobile terminals and if said waiting time passes without said plurality of mobile terminals receiving said content, said plurality of mobile terminals requesting to download said content from said MMSC server via said dedicated point-to-point transmission channel, as suggested by Tamura. This combination would benefit the system by receiving and obtaining desired contents at desired time (Tamura [0007]).

10. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lipsanen and Kuisma and Kim and Fingerhut and in further view of U.S. PGPub 2005/0015797 to Noblecourt et al (hereinafter Noblecourt).

As per claim 8, the combination teaches the transmission method according to claim 1.

Although the combination teaches **identifier** (Lipsanen pg. 8 lines 5-14), the combination is silent on **wherein said identifier includes uniform resource identifier information serving as a unique identifier.**

However, Noblecourt teaches a uniform resource identifier ([0030]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination to have wherein said identifier includes uniform resource identifier information serving as a unique identifier, as suggested by Noblecourt. This combination would benefit the system by allowing each element or piece of data to be uniquely referenced (Noblecourt [0030]).

11. Claim(s) 23-24 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Lipsanen and Kuisma and Kim and Fingerhut and in further view of US Patent 5,995,092 to Yuen et al (hereinafter Yuen).

As per claim 23, the combination teaches **the transmission method according to claim 1**.

Although the combination teaches **further comprising the wherein the plurality of mobile terminals indicate interest in said content** (Lipsanen pg. 1 lines 5-7; abstract; pg. 10 lines 14-16), the combination does not explicitly disclose **in the context of a promotional campaign**.

In a similar field of endeavor, Yuen teaches users initiates interest in a subscription service by accepting a subscription with a promotion via calling customer service center (col. 7 lines 24-47 and col. 11 lines 34-36).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination to have indicating interest in the context of a promotional campaign, as suggested by Yuen. This combination would benefit the

system by combining real-time information distribution features with the ease of use, low cost and existing broadcasting infrastructure of a system (Yuen col. 1 lines 45-49).

As per claim 24, the combination teaches **the transmission method according to claim 1**.

Although the combination teaches **further comprising the wherein the plurality of mobile terminals indicate interest in said content** (Lipsanen pg. 1 lines 5-7; abstract; pg. 10 lines 14-16), the combination does not explicitly disclose **through subscriptions**.

In a similar field of endeavor, Yuen teaches users initiates interest in a subscription service by accepting a subscription with a promotion via calling customer service center (col. 7 lines 24-47 and col. 11 lines 34-36).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination to have indicating interest through subscriptions, as suggested by Yuen. This combination would benefit the system by combining real-time information distribution features with the ease of use, low cost and existing broadcasting infrastructure of a system (Yuen col. 1 lines 45-49).

12. Claim(s) 11 and 12 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 03/045064 to Lipsanen et al (hereinafter Lipsanen) and in further view of US PGPub 2002/0078228 to Kuisma et al (hereinafter Kuisma) and in further view of US PGPub 2004/0029596 to Kim et al (hereinafter Kim) and in further view of US PGPub

2004/0171383 to Fingerhut et al (hereinafter Fingerhut) and in further view of US
PGPub 2004/0198279 to Anttila et al (hereinafter Anttila).

As per claim 11, Lipsanen teaches a method of reception of multimedia content by mobile terminals adapted to communicate via a radiocommunication network with a point-to-point content transmission multimedia messaging services center (MMSC) server (abstract, discloses a transmission system to transmit voice, packet data and digital broadcast/multicast services; fig. 1 box 120, discloses a Telecom/Portal server; pg. 9 lines 27-29, discloses Telecom server transmitting content through UMTS/GPRS network to a terminal), **said method comprising:**

a first step of mobile terminals (abstract, discloses a mobile terminal; pg. 1 lines 5-7, discloses multiple terminals to receive services) **receiving an identifier specific to a content from said server in an point-to-point link notification over a dedicated point-to-point radiocommunication network transmission channel** (abstract, discloses a transmission system to transmit voice, packet data and digital broadcast/multicast services; pg. 8 lines 5-14, discloses user send "get n" message to server 120 and then server 120 forwards service parameters such as program identifier to the terminal via the UMTS/GPRS network; pg. 8 lines 12-21, discloses telecom server transmitting service parameters to a terminal and the service parameters include a time in which a transmission will start (i.e. a notification). Examiner correspond any one of voice, packet data and digital broadcast/multicast services and forwards service parameters to applicant's content and notification, respectively), **where said mobile terminals** (abstract; pg. 1 lines 5-7) **registered with said server** (pg. 8 lines 5-14) **as**

being interested in said content (abstract) prior to said first step (pg. 10 lines 14-16, discloses user's viewing privileges can be set by previous agreements with either the telecom or broadcast operators. Examiner correspond previous agreements to applicant's registered...as interested in...content prior to...first step.);

a server adapted to provide a broadcast content transmission service (fig. 1 box 130, discloses a broadcast server; pg. 7 lines 28-29, discloses broadcast programs transmitted from broadcast network 140)

and a third step of said mobile terminals receiving a message from said server over a broadcast channel including said content (abstract, discloses the terminal receive the broadcast service transmitted by the broadcast network 140; pg. 1 lines 5-7, discloses multiple terminals to receive services; pg. 4 lines 4-5, discloses broadcast server 130 coupled to broadcast network 140; pg. 7 lines 28-29, discloses broadcast programs transmitted from broadcast network 140).

Although Lipsanen teaches **a content, a server and a point-to-point link notification**, Lipsanen is silent on **a multimedia messaging services (MMS) content, a multimedia messaging services center (MMSC) server and an MMS-standardized point-to-point link notification**.

However, Kuisma teaches a MMSC transmitting a M-NOTIFIC-IND line 12 to a terminal (fig. 1) and MMSC transmitting a multimedia message to a terminal (paragraph [0042]).

Lipsanen teaches a content, a server and a point-to-point link notification and the multimedia messaging services (MMS) standard is a well known standard for having

MMS content, a MMSC server and a multimedia messaging services (MMS)-standardization of a point-to-point link notification. Furthermore, it is well known in the art that applying a well known standard, or protocol, to a system provides the system with significantly improved industrial applicability. Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the MMS standard to the system of Lipsanen, since it is well known in the art that applying a well known standard, or protocol, to a system provides the system with significantly improved industrial applicability.

Although the combination teaches **a server adapted to provide a broadcast content transmission service** and **...said server over a broadcast channel**, the combination is silent on **a multimedia broadcast multicast system (MBMS) broadcast multicast service center (BM-SC) server** and **...said BM-SC server over a broadcast channel**.

However, Kim teaches a MBMS BM-SC broadcasting (paragraph [0025]).

Lipsanen teaches a server adapted to provide a broadcast content transmission service and **...said server over a broadcast channel** and the multimedia broadcast multicast system (MBMS) standard is a well known standard for having a MBMS BM-SC server broadcasting. Furthermore, it is well known in the art that applying a well known standard, or protocol, to a system provides the system with significantly improved industrial applicability. Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the MBMS standard to the system of Lipsanen and Kuisma, since it is well known in the art that applying a well known standard, or

protocol, to a system provides the system with significantly improved industrial applicability.

Although the combination teaches **said MMSC server, said MMS content in its entirety, said identifier, a multimedia broadcast multicast system (MBMS) broadcast multicast service center (BM-SC) server adapted to provide a broadcast content transmission service and said mobile terminals receiving a message from said BM-SC server over a broadcast channel including said MMS content**, the combination is silent on **a second step of said MMSC server transmitting said MMS content in its entirety and said identifier in a broadcast request to a multimedia broadcast multicast system (MBMS) broadcast multicast service center (BM-SC) server and said mobile terminals receiving a message from said BM-SC server over a broadcast channel including said MMS content and said identifier.**

However, Fingerhut teaches a first server/"message server" creates a broadcast request/"fleet broadcast request", which includes the content in its entirety/"payload message" with the identifier/"message ID" and transmits the broadcast request to second server/"activation gateway" for broadcast transmission of the payload and ID ([0129-0131]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination to have a second step of said MMSC server transmitting said MMS content in its entirety and said identifier in a broadcast request to a multimedia broadcast multicast system (MBMS) broadcast multicast

service center (BM-SC) server and said mobile terminals receiving a message from said BM-SC server over a broadcast channel including said MMS content and said identifier, as suggested by Fingerhut. This combination would benefit the system by allowing for the efficient delivery of information in a broadcast fashion (Fingerhut [0125]).

Although the combination teaches **a broadcast request**, the combination is silent on **an MMS broadcast request**.

However, Anttila teaches a request to broadcast MMS messages using a broadcast server (paragraphs [0041-0042]).

Fingerhut teaches a broadcast request and the multimedia messaging services (MMS) standard is a well known standard for having a MMS broadcast request. Furthermore, it is well known in the art that applying a well known standard, or protocol, to a system provides the system with significantly improved industrial applicability. Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the MMS standard to the system of Lipsanen and Kuisma and Kim and Fingerhut, since it is well known in the art that applying a well known standard, or protocol, to a system provides the system with significantly improved industrial applicability.

As per claim 12, the combination teaches **the reception method according to claim 11 further comprising:**

said mobile terminals receiving a decryption key over said dedicated point-to-point radiocommunication network transmission channel (Lipsanen pg. 11, lines

11-12, discloses the broadcast keys are sent to the user which allow the terminal to decrypt the digital packets; pg. 1 lines 5-7);

and said mobile terminals utilizing said decryption key to decrypt (Lipsanen pg. 11, lines 11-12, discloses the broadcast keys are sent to the user which allow the terminal to decrypt the digital packets; pg. 1 lines 5-7) **said MMS content** (Kuisma paragraph [0042]).

Examiner provides the same rationale for the combination as stated in claim 11.

13. Claim(s) 13 and 16 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Lipsanen and Kuisma and Kim and Fingerhut and Anttila and in further view of U.S. PGPub 2003/0186704 to Tamura et al (hereinafter Tamura).

As per claim 13, the combination teaches **the reception method according to claim 11**.

Although the combination teaches **said mobile terminals receiving said identifier** (Lipsanen fig. 1 and pg. 8 lines 5-14 and pg. 1 lines 5-7), **said mobile terminal receiving said MMS** (Kuisma paragraph [0042]) **content** (Lipsanen abstract, discloses the terminal receive the broadcast service transmitted by the broadcast network 140 and reasoning above) and **said mobile terminals download said MMS content from said MMSC server via said dedicated point-to-point radiocommunication network transmission channel** (Lipsanen pg. 9 lines 27-29 and pg. 8 lines 5-14 and pg. 1 lines 5-7 and Kuisma fig. 1 and paragraph [0042]), the combination is silent on **said mobile terminals receiving a value accompanying said**

identifier corresponding to a waiting time for reception of said MMS content, wherein if said waiting time passes without said mobile terminals receiving said MMS content, said mobile terminals requesting to download said MMS content from said MMSC server via said dedicated point-to-point radiocommunication network transmission channel.

However, Tamura teaches first server/"content server" sends the waiting time/"maximum permissible value of the waiting time" to the mobile terminals ([0138]) and a terminal operating in standby for a certain waiting time and when the terminal hasn't received notification from the base station within the waiting time, the terminal makes a request to the first server/"content server" for download of content ([0026]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination to have said mobile terminals receiving a value accompanying said identifier corresponding to a waiting time for reception of said MMS content, wherein if said waiting time passes without said mobile terminals receiving said MMS content, said mobile terminals requesting to download said MMS content from said MMSC server via said dedicated point-to-point radiocommunication network transmission channel, as suggested by Tamura. This combination would benefit the system by receiving and obtaining desired contents at desired time (Tamura [0007]).

As per claim 16, the combination teaches the reception method according to claim 11.

Although the combination teaches **said mobile terminals receiving said identifier** (Lipsanen fig. 1 and pg. 8 lines 5-14 and pg. 1 lines 5-7), **said mobile terminal receiving said MMS** (Kuisma paragraph [0042]) **content** (Lipsanen abstract, discloses the terminal receive the broadcast service transmitted by the broadcast network 140 and reasoning above) and **said mobile terminals download said MMS content from said MMSC server via said dedicated point-to-point radiocommunication network transmission channel** (Lipsanen pg. 9 lines 27-29 and pg. 8 lines 5-14 and pg. 1 lines 5-7 and Kuisma fig. 1 and paragraph [0042]), the combination is silent on **said mobile terminals receiving a value accompanying said identifier corresponding to a waiting time for reception of said MMS content, wherein if said waiting time passes without said mobile terminals receiving said content, said mobile terminals requesting to download said MMS content from said MMSC server via said dedicated point-to-point radiocommunication network transmission channel.**

However, Tamura teaches first server/"content server" sends the waiting time/"maximum permissible value of the waiting time" to the mobile terminals ([0138]) and a terminal operating in standby for a certain waiting time and when the terminal hasn't received notification from the base station within the waiting time, the terminal makes a request to the first server/"content server" for download of content ([0026]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination to have said mobile terminals receiving a value accompanying said identifier corresponding to a waiting time for reception of said

MMS content, wherein if said waiting time passes without said mobile terminals receiving said content, said mobile terminals requesting to download said MMS content from said MMSC server via said dedicated point-to-point radiocommunication network transmission channel, as suggested by Tamura. This combination would benefit the system by receiving and obtaining desired contents at desired time (Tamura [0007]).

14. Claim(s) 25-26 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Lipsanen and Kuisma and Kim and Fingerhut and Anittila and in further view of US Patent 5,995,092 to Yuen et al (hereinafter Yuen).

As per claim 25, the combination teaches the reception method according to claim 11.

Although the combination teaches **further comprising the wherein the plurality of mobile terminals indicate interest in said content** (Lipsanen pg. 1 lines 5-7; abstract; pg. 10 lines 14-16), the combination does not explicitly disclose **in the context of a promotional campaign**.

In a similar field of endeavor, Yuen teaches users initiates interest in a subscription service by accepting a subscription with a promotion via calling customer service center (col. 7 lines 24-47 and col. 11 lines 34-36).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination to have indicating interest in the context of a promotional campaign, as suggested by Yuen. This combination would benefit the

system by combining real-time information distribution features with the ease of use, low cost and existing broadcasting infrastructure of a system (Yuen col. 1 lines 45-49).

As per claim 26, the combination teaches **the reception method according to claim 11, further comprising the wherein the plurality of mobile terminals indicate interest in said content** (Lipsanen pg. 1 lines 5-7; abstract; pg. 10 lines 14-16), the combination does not explicitly disclose **through subscriptions**.

In a similar field of endeavor, Yuen teaches users initiates interest in a subscription service by accepting a subscription with a promotion via calling customer service center (col. 7 lines 24-47 and col. 11 lines 34-36).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination to have indicating interest through subscriptions, as suggested by Yuen. This combination would benefit the system by combining real-time information distribution features with the ease of use, low cost and existing broadcasting infrastructure of a system (Yuen col. 1 lines 45-49).

15. Claim(s) 17 and 22 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 03/045064 to Lipsanen et al (hereinafter Lipsanen) and in further view of US PGPub 2004/0171383 to Fingerhut et al (hereinafter Fingerhut).

As per claim 17, Lipsanen teaches **a method for a transmission system to transmit multimedia content to a plurality of mobile terminals** (abstract, discloses a transmission system to transmit voice, packet data and digital broadcast/multicast

services) **over a radiocommunication network** (fig. 1 show a UMTS/GPRS network) **comprising:**

a first step of a first server (fig. 1 box 120, discloses a Telecom/Portal server) **adapted to provide a point-to-point content transmission service** (pg. 9 lines 27-29, discloses Telecom server transmitting content through UMTS/GPRS network to a terminal) **transmitting a point-to-point link notification** (pg. 8 lines 12-21, discloses telecom server transmitting service parameters to a terminal and the service parameters include a time in which a transmission will start (i.e. a notification)) **including an identifier specific to a content over a dedicated point-to-point transmission channel over a radiocommunication network transmission channel to a plurality of mobile terminals, wherein said plurality of mobile terminals registered with said first server as interested in said content prior to said first step** (fig. 1 shows a telecom server 120; pg. 1 lines 5-7, discloses multiple terminals to receive services; abstract, discloses a transmission system to transmit voice, packet data and digital broadcast/multicast services. pg. 8 lines 5-14, discloses user send "get n" message to server 120 and then server 120 forwards service parameters such as program identifier to the terminal via the UMTS/GPRS network; pg. 10 lines 14-16, discloses user's viewing privileges can be set by previous agreements with either the telecom or broadcast operators. Examiner correspond previous agreements and any one of voice, packet data and digital broadcast/multicast services to applicant's registered...as interested in...content prior to...first step and content, respectively);

a second server adapted to provide a broadcast content transmission service (fig. 1 box 130, discloses a broadcast server; pg. 7 lines 28-29, discloses broadcast programs transmitted from broadcast network 140)

and a third step of said second server broadcasting (fig. 1 box 130, discloses a broadcast server) **a message including said content over a broadcast channel** (pg. 4 lines 4-5, discloses broadcast server 130 coupled to broadcast network 140; pg. 7 lines 28-29, discloses broadcast programs transmitted from broadcast network 140).

Although Lipsanen teaches **said first server, a second server adapted to provide a broadcast content transmission service, said content in its entirety and said identifier**, Lipsanen does not explicitly disclose **a second step of said first server transmitting a broadcast-request to a second server adapted to provide a broadcast content transmission service, said broadcast request including said content in its entirety and said identifier**.

However, Fingerhut teaches a first server/"message server" creates a broadcast request/"fleet broadcast request", which includes the content in its entirety/"payload message" with the identifier/"message ID" and transmits the broadcast request to second server/"activation gateway" for broadcast transmission of the payload and ID ([0129-0131]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination to have a second step of said first server transmitting a broadcast-request to a second server adapted to provide a broadcast content transmission service, said broadcast request including said content in its

entirety and said identifier, as suggested by Fingerhut. This combination would benefit the system by allowing for the efficient delivery of information in a broadcast fashion (Fingerhut [0125]).

As per claim 22, the combination teaches **the method according to claim 17, further comprising said first server transmitting** (Lipsanen fig. 1; pg. 4 lines 7-9, discloses servers communicate with mobile terminal via a network for providing information relative to services) **a decryption key to said mobile terminal for use in decrypting said content** (Lipsanen, pg. 11 lines 11-12, discloses the broadcast keys are sent to the users which allow the terminals to decrypt the digital packets).

16. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lipsanen and Fingerhut and in further view of U.S. PGPub 2005/0015797 to Noblecourt et al (hereinafter Noblecourt).

As per claim 18, the combination teaches **the method of claim 17.**

Although the combination teaches **identifier** (Lipsanen pg. 8 lines 5-14), the combination is silent on **wherein said identifier includes uniform resource identifier information serving as a unique identifier.**

However, Noblecourt teaches a uniform resource identifier ([0030]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination to have wherein said identifier includes

uniform resource identifier information serving as a unique identifier, as suggested by Noblecourt. This combination would benefit the system by allowing each element or piece of data to be uniquely referenced (Noblecourt [0030]).

17. Claim(s) 19 and 20 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Lipsanen and Fingerhut and in further view of US PGPub 2002/0078228 to Kuisma et al (hereinafter Kuisma) and in further view of US PGPub 2004/0029596 to Kim et al (hereinafter Kim).

As per claim 19, the combination teaches **the method of claim 17**.

Although the combination teaches **said first server and said second server**, the combination does not explicitly disclose **a multimedia messaging services center (MMSC) server and a multimedia broadcast multicast system (MBMS) broadcast multicast service center (BM- SC) server**.

However, Kuisma teaches a MMSC transmitting a M-NOTIFIC-IND line 12 to a terminal (fig. 1) and MMSC transmitting a multimedia message to a terminal (paragraph [0042]).

Lipsanen teaches a first server and the multimedia messaging services (MMS) standard is a well known standard for having a MMSC server. Furthermore, it is well known in the art that applying a well known standard, or protocol, to a system provides the system with significantly improved industrial applicability. Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the MMS standard to the system of Lipsanen, since it is well known in the art that applying a well

known standard, or protocol, to a system provides the system with significantly improved industrial applicability.

Although the combination teaches **said second server**, the combination does not explicitly disclose **a multimedia broadcast multicast system (MBMS) broadcast multicast service center (BM- SC) server**.

However, Kim teaches a MBMS BM-SC broadcasting (paragraph [0025]).

Lipsanen teaches a second server and the multimedia broadcast multicast system (MBMS) standard is a well known standard for having a MBMS BM-SC server broadcasting. Furthermore, it is well known in the art that applying a well known standard, or protocol, to a system provides the system with significantly improved industrial applicability. Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the MBMS standard to the system of Lipsanen and Kuisma, since it is well known in the art that applying a well known standard, or protocol, to a system provides the system with significantly improved industrial applicability.

As per claim 20, the combination teaches **the method of claim 19 wherein said point-to-point link notification** (Lipsanen pg. 8 lines 12-21) **is a multimedia messaging services (MMS)-standardized point-to-point link notification M-Notification.ind message** (Kuisma fig. 1 shows a MMSC transmitting a M-NOTIFICATION line 12 to a terminal).

Examiner provides the same rationale for the combination as stated in claim 19.

18. Claim(s) 21 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Lipsanen and Fingerhut and in further view of US PGPub 2003/0186704 to Tamura et al (hereinafter Tamura).

As per claim 21, the combination teaches **the method according to claim 17**.

Although the combination teaches **said identifier** (Lipsanen fig. 1 and pg. 8 lines 5-14; pg. 1 lines 5-7), **reception of said content by said plurality of mobile terminals** (Lipsanen abstract, discloses the terminal receive the broadcast service transmitted by the broadcast network 140), **at least one of said plurality of mobile terminals download said content** (Lipsanen pg. 8 lines 5-14; pg. 7 lines 28-29), **said dedicated point-to-point transmission channel** (Lipsanen pg. 8 lines 5-14), the combination does not explicitly teach **wherein, said identifier is accompanied by a value corresponding to a waiting time for reception of said content by said mobile terminals, wherein at least one of said mobile terminals requesting to download said content from said second server via said dedicated point-to-point transmission channel when said waiting time passes without said at least one of said mobile terminals receiving said content**.

However, Tamura teaches content server sends the maximum permissible value of the waiting time to the mobile terminals ([0138]) and a terminal operating in standby for a certain waiting time and when the terminal hasn't received notification from the base station within the waiting time, the terminal makes a request to the content server for download of content ([0026]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination to have wherein, said identifier is accompanied by a value corresponding to a waiting time for reception of said content by said mobile terminals, wherein at least one of said mobile terminals requesting to download said content from said second server via said dedicated point-to-point transmission channel when said waiting time passes without said at least one of said mobile terminals receiving said content, as suggested by Tamura. This combination would benefit the system by receiving and obtaining desired contents at desired time (Tamura [0007]).

Conclusion

19. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PETER CHAU whose telephone number is (571)270-7152. The examiner can normally be reached on Monday-Friday 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. C./
Examiner, Art Unit 2476

/Ayaz R. Sheikh/
Supervisory Patent Examiner, Art
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